IN THE CLAIMS:

A complete listing of the claims is set forth below:

1.   **(Currently Amended)** A method for resource capacity collaboration, comprising:

accessing an assignment of an item used in producing a product for a customer to a first resource of a ~~factory~~ factory, associated with a supplier, in a first production period;

accessing a capacity value representing a capacity of the first resource to process one or more items in the first production period;

accessing a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generating a notification ~~if the demand value exceeds the capacity value;~~ of the demand-capacity mismatch, automatically communicating the notification to a user associated with the ~~customer;~~ customer, and allowing the user associated with the customer to reassign ~~reassigning~~ at least a portion of the demand placed on the first resource in the first production period to at least one of a second resource and a second production ~~period.~~ period;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the first resource of the factory to at least one of a second resource of the same factory, allowing the user associated with the customer to reassign at least a portion of the demand to another factory to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the second resource of the factory to another factory, allowing the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

2.   **(Canceled)**

3.   **(Currently Amended)** The method of Claim 2, 1, wherein:

the notification is also automatically communicated to at least one of a user associated with the factory and a user associated with a the supplier;

the reassignment is initiated by at least one of the user associated with the factory and the user associated with the supplier, respectively;

the reassignment is to a second resource in the same factory if initiated by the user associated with the factory; and

the reassignment is to a second resource in another factory if initiated by the user associated with the supplier.

4.   **(Canceled)**

5.   **(Original)** The method of Claim 1, wherein the demand value reflects a factoring value associated with processing the item using the first resource, the demand value equaling the factoring value multiplied by a nominal demand value representing a demand that would be placed on the first resource in processing a standard item.

6.   **(Original)** The method of Claim 1, further comprising:

storing a requested capacity value representing a capacity of the first resource requested by the customer;

storing a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer; and

generating a notification when the requested capacity value is different than the committed capacity value.

7.   **(Original)** The method of Claim 6, further comprising:

storing a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request; and

generating a notification when the requested capacity value exceeds the contracted capacity value.

8.   **(Original)** The method of Claim 1, further comprising:

storing an estimated capacity value representing an estimated capacity of the resource made by the customer; and

generating a notification when the capacity value is different than the estimated capacity value.

9.   **(Original)** The method of Claim 1, further comprising generating a notification when the capacity value exceeds the demand value.

10.   **(Original)** The method of Claim 1, wherein the first and second resources are associated with different factories.

11.   **(Original)** The method of Claim 1, wherein the first and second resources are associated with different suppliers.

12.   **(Currently Amended)** The method of Claim 1, further comprising:

storing at least one access privilege; and

making the assignment, the capacity value, the demand value, and the notification available to a user associated with at least one of the customer, the factory, and a the supplier based on the access privilege.

13.   (Original) The method of Claim 1, wherein at least one additional resource is associated with the factory, the additional resource operable to receive and process a second item from the first resource, the method further comprising:

storing a demand value associated with the additional resource, the demand value for the additional resource based at least partially on the demand value for the first resource; and

propagating a change in the demand value for the first resource to the demand value for the additional resource, the change in the demand value for the first resource resulting in a change in the demand value for the additional resource.

14.   (Original) The method of Claim 13, further comprising providing a tree structure to the user in a display, the tree structure comprising the first resource, the additional resource, and at least the demand values for the first resource and additional resource.

15.   **(Currently Amended)** Software for resource capacity collaboration, the software embodied in at least one computer-readable medium and when executed operable to:

accessing an assignment of an item used in producing a product for a customer to a first resource of a ~~factory~~ factory, associated with a supplier, in a first production period;

accessing a capacity value representing a capacity of the first resource to process one or more items in the first production period;

accessing a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generating a notification ~~if the demand value exceeds the capacity value;~~ of the demand-capacity mismatch, automatically communicating the notification to a user associated with the ~~customer;~~ customer, and allowing the user associated with the customer to reassign ~~reassigning~~ at least a portion of the demand placed on the first resource in the first production period to at least one of a second resource and a second production ~~period.~~ period;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the first resource of the factory to at least one of a second resource of the same factory, allowing the user associated with the customer to reassign at least a portion of the demand to another factory to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the second resource of the factory to another factory, allowing the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

16.   **(Canceled)**

17.   **(Currently Amended)** The software of Claim ~~16,~~ 15, further operable to:

automatically communicate the notification to at least one of a user associated with the factory and a user associated with a the supplier; and

allow at least one of the user associated with the factory and the user associated with the supplier, respectively, to reassign at least a portion of the demand value to a second resource in the same factory or a second resource in another factory, respectively.

18.   **(Canceled)**

19.   **(Original)** The software of Claim 15, wherein the demand value reflects a factoring value associated with processing the item using the first resource, the demand value equaling the factoring value multiplied by a nominal demand value representing a demand that would be placed on the first resource in processing a standard item.

20.   **(Original)** The software of Claim 15, further operable to:

store a requested capacity value representing a capacity of the first resource requested by the customer;

store a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer; and

generate a notification when the requested capacity value is different than the committed capacity value.

21.   **(Original)** The software of Claim 20, further operable to:

store a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request; and

generate a notification when the requested capacity value exceeds the contracted capacity value.

22.   **(Original)** The software of Claim 15, further operable to:

store an estimated capacity value representing an estimated capacity of the resource made by the customer; and

generate a notification when the capacity value is different than the estimated capacity value.

23.   **(Original)** The software of Claim 15, further operable to generate a notification when the capacity value exceeds the demand value.

24.   **(Original)** The software of Claim 15, wherein the first and second resources are associated with different factories.

25.   **(Currently Amended)** The software of Claim 15, wherein the first and second resources are associated with different suppliers.

26.   **(Original)** The software of Claim 15, further operable to:

store at least one access privilege; and

make the assignment, the capacity value, the demand value, and the notification available to a user associated with one of the customer, the factory, and the supplier based on the access privilege.

27.   **(Original)** The software of Claim 15, wherein:

at least one additional resource is associated with the factory, the additional resource operable to receive and process a second item from the first resource; and

the software is further operable to:

store a demand value associated with the additional resource, the demand value for the additional resource based at least partially on the demand value for the first resource; and

propagate a change in the demand value for the first resource to the demand value for the additional resource, the change in the demand value for the first resource resulting in a change in the demand value for the additional resource.

28.   **(Original)** The software of Claim 27, further operable to provide a tree structure to the user in a display, the tree structure comprising the first resource, the additional resource, and at least the demand values for the first resource and additional resource.

29.   **(Currently Amended)** A system for resource capacity collaboration, comprising:

a memory operable to store:

an assignment of an item used in producing a product for a customer to a first resource of a ~~factory~~ factory, associated with a supplier, in a first production period;

a capacity value representing a capacity of the first resource to process one or more items in the first production period;

a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

one or more processors collectively operable to:

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generate a notification ~~if the demand value exceeds the capacity value;~~ of the demand-capacity mismatch, automatically communicate the notification to a user associated with the ~~customer;~~ customer, and allow the user associated with the customer to reassign at least a portion of the demand placed on the first resource in the first production period to at least one of a second resource and a second production ~~period.~~ period;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the first resource of the factory to at least one of a second resource of the same factory, allowing the user associated with the customer to reassign at least a portion of the demand to another factory to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment of at least a portion of the demand placed on the second resource of the factory to another factory, allowing the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

30.   **(Canceled)**

31.   **(Currently Amended)** The system of Claim ~~30,~~ 29, wherein the processors are further operable to:

automatically communicate the notification to at least one of a user associated with the factory and a user associated with a the supplier; and

allow at least one of the user associated with the factory and the user associated with the supplier, respectively, to reassign at least a portion of the demand value to a second resource in the same factory or a second resource in another factory, respectively.

32.   **(Canceled)**

33.   **(Original)** The system of Claim 29, wherein the demand value reflects a factoring value associated with processing the item using the first resource, the demand value equaling the factoring value multiplied by a nominal demand value representing a demand that would be placed on the first resource in processing a standard item.

34.   **(Original)** The system of Claim 29, wherein:

the memory is further operable to:

store a requested capacity value representing a capacity of the first resource requested by the customer; and

store a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer; and

the processors are further operable to generate a notification when the requested capacity value is different than the committed capacity value.

35.   **(Original)** The system of Claim 34, wherein:

the memory is further operable to store a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request; and

the processors are further operable to generate a notification when the requested capacity value exceeds the contracted capacity value.

36.   **(Original)** The system of Claim 29, wherein:

the memory is further operable to store an estimated capacity value representing an estimated capacity of the resource made by the customer; and

the processors are further operable to generate a notification when the capacity value is different than the estimated capacity value.

37.   **(Original)** The system of Claim 29, wherein the processors are further operable to generate a notification when the capacity value exceeds the demand value.

38.   **(Original)** The system of Claim 29, wherein the first and second resources are associated with different factories.

39.   (Currently Amended) The system of Claim 29, wherein the first and second resources are associated with different suppliers.

40.   **(Original)** The system of Claim 29, wherein:

the memory is further operable to store at least one access privilege; and

the processors are further operable to make the assignment, the capacity value, the demand value, and the notification available to a user associated with one of the customer, the factory, and the supplier based on the access privilege.

41.   (Original) The system of Claim 29, wherein:

at least one additional resource is associated with the factory, the additional resource operable to receive and process a second item from the first resource;

the memory is further operable to store a demand value associated with the additional resource, the demand value for the additional resource based at least partially on the demand value for the first resource; and

the processors are further operable to propagate a change in the demand value for the first resource to the demand value for the additional resource, the change in the demand value for the first resource resulting in a change in the demand value for the additional resource.

42.   (Original) The system of Claim 41, wherein the processor is further operable to provide a tree structure to the user in a display, the tree structure comprising the first resource, the additional resource, and at least the demand values for the first resource and additional resource.

43.   **(Original)** A method for resource capacity collaboration, comprising:

accessing an assignment of a particular item used in producing a product for a particular customer to a particular first resource of a particular factory associated with a particular supplier in a first production period, the first resource operable to perform at least one processing step involving the particular item;

accessing a capacity value representing a capacity of the first resource to process one or more items in the first production period;

accessing a demand value representing a demand placed on the first resource in the first production period by the assignment of the particular item to the first resource;

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generating a notification in response to the demand-capacity mismatch;

automatically communicating the notification to a user associated with the factory, a user associated with the supplier, and a user associated with the customer;

allowing the user associated with the factory to reassign at least a portion of the demand to at least one of a second resource of the same factory and a second production period to attempt to resolve the demand-capacity mismatch;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the factory, allowing the user associated with the supplier to reassign at least a portion of the demand to another factory also associated with the supplier to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the supplier, allowing the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

44.   (Original) Software for resource capacity collaboration, the software being embodied in at least one computer-readable medium and when executed operable to:

access an assignment of a particular item used in producing a product for a particular customer to a particular first resource of a particular factory associated with a particular supplier in a first production period, the first resource operable to perform at least one processing step involving the particular item;

access a capacity value representing a capacity of the first resource to process one or more items in the first production period;

access a demand value representing a demand placed on the first resource in the first production period by the assignment of the particular item to the first resource;

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generate a notification in response to the demand-capacity mismatch;

automatically communicate the notification to a user associated with the factory, a user associated with the supplier, and a user associated with the customer;

allow the user associated with the factory to reassign at least a portion of the demand to at least one of a second resource of the same factory and a second production period to attempt to resolve the demand-capacity mismatch;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the factory, allow the user associated with the supplier to reassign at least a portion of the demand to another factory also associated with the supplier to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the supplier, allow the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

45.   **(Original)** A system for resource capacity collaboration, comprising:

a memory operable to store:

an assignment of a particular item used in producing a product for a particular customer to a particular first resource of a particular factory associated with a particular supplier in a first production period, the first resource operable to perform at least one processing step involving the particular item;

a capacity value representing a capacity of the first resource to process one or more items in the first production period;

a demand value representing a demand placed on the first resource in the first production period by the assignment of the particular item to the first resource;

one or more processors collectively operable to:

if a demand-capacity mismatch exists with respect to the first resource in that the demand value exceeds the capacity value, automatically generate a notification in response to the demand-capacity mismatch;

automatically communicate the notification to a user associated with the factory, a user associated with the supplier, and a user associated with the customer;

allow the user associated with the factory to reassign at least a portion of the demand to at least one of a second resource of the same factory and a second production period to attempt to resolve the demand-capacity mismatch;

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the factory, allow the user associated with the supplier to reassign at least a portion of the demand to another factory also associated with the supplier to attempt to resolve the demand-capacity mismatch; and

if the demand-capacity mismatch cannot be fully resolved as a result of reassignment by the user associated with the supplier, allow the user associated with the customer to reassign at least a portion of the demand to another supplier to attempt to resolve the demand-capacity mismatch.

46.   **(Original)** A method for resource capacity collaboration, comprising:

accessing an estimated capacity value representing a customer-estimated capacity of a first resource of a factory used in producing a product for the customer, the first resource operable to perform at least one processing step in producing the product;

accessing a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request;

accessing a requested capacity value representing a capacity of the first resource requested by the customer to be used in producing the product for the customer;

accessing a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer;

accessing an assignment of an item used in producing the product to the first resource;

accessing a capacity value representing a capacity of the first resource to process one or more items in a first production period;

accessing a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

automatically generating a notification in response to a circumstance selected from the group consisting of:

the requested capacity value being different than the committed capacity value;

the requested capacity value exceeding the contracted capacity value;

the capacity value being different than the estimated capacity value; and

the capacity value exceeding the demand value;

automatically communicating the notification to a user associated with the customer, the user associated with the supplier, and the user associated with the factory; and

allowing at least one of the users to resolve the circumstance in response to the notification.

47.   (Original) Software for resource capacity collaboration, the software being embodied in at least one computer-readable medium and when executed operable to:

access an estimated capacity value representing a customer-estimated capacity of a first resource of a factory used in producing a product for the customer, the first resource operable to perform at least one processing step in-producing the product;

access a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request;

access a requested capacity value representing a capacity of the first resource requested by the customer to be used in producing the product for the customer;

access a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer;

access an assignment of an item used in producing the product to the first resource;

access a capacity value representing a capacity of the first resource to process one or more items in a first production period;

access a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

automatically generate a notification in response to a circumstance selected from the group consisting of:

the requested capacity value being different than the committed capacity value;

the requested capacity value exceeding the contracted capacity value;

the capacity value being different than the estimated capacity value; and

the capacity value exceeding the demand value;

automatically communicate the notification to a user associated with the customer, the user associated with the supplier, and the user associated with the factory; and

allow at least one of the users to resolve the circumstance in response to the notification.

48.   (Original) A system for resource capacity collaboration, comprising: a memory operable to store:

an estimated capacity value representing a customer-estimated capacity of a first resource of a factory used in producing a product for the customer, the first resource operable to perform at least one processing step in producing the product;

a contracted capacity value representing a maximum capacity of the first resource that the customer is allowed to request;

a requested capacity value representing a capacity of the first resource requested by the customer to be used in producing the product for the customer;

a committed capacity value representing a capacity of the first resource that at least one of a user associated with the factory and a user associated with a supplier agrees to provide the customer;

an assignment of an item used in producing the product to the first resource;

a capacity value representing a capacity of the first resource to process one or more items in a first production period;

a demand value representing a demand placed on the first resource in the first production period by the assignment of the item to the first resource;

one or more processors collectively operable to:

automatically generate a notification in response to a circumstance selected from the group consisting of the requested capacity value being different than the committed capacity value, the requested capacity value exceeding the contracted capacity value, the capacity value being different than the estimated capacity value, and the capacity value exceeding the demand value;

automatically communicate the notification to a user associated with the customer, the user associated with the supplier, and the user associated with the factory; and

allow at least one of the users to resolve the circumstance in response to the notification.